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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/546,031	04/10/2000	Christopher Keith	IVEN125461	3070

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EXAMINER

GRAHAM, CLEMENT B

ART UNIT PAPER NUMBER

3628

DATE MAILED: 05/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/546,031

Applicant(s)

KEITH, CHRISTOPHER

Examiner

Clement B. Graham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/23/06 has been entered.
2. Claims 1-16 remained pending and claims 17-22 has been added.

#### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made

4. Claims 1-22, are rejected under 35 U.S.C. 103(a) as being unpatentable over Keiser et al, U.S Patent 6, 505, 174 in view Korhammer et al (Hereafter Korhammer U.S Patent 6,278, 982).

As per claims 1-3, 6, 17, and 19, Keiser discloses a method of providing a published price for a security comprising: notifying (i. e, displays instruments") a set of computers (i. e, plurality of client computers") of a proposed price for buying or selling the security, and a computer. (Note abstract and see column 2 lines 57-67 and column 3 lines 1-28).

Keiser fail to explicitly teach determining whether any of the first computer program entities has offered an improved price, higher than the proposed price for buying or lower than the proposed price for selling and providing the improved price as the published price, wherein the notifying, determining and providing and are performed by a program second computer program entity executing on a computer.

However Korhammer discloses at trading terminal, the customer may filter and/or customize the data displayed based on trading preferences. These features allow the customer to remove orders that are less desirable and view the data in a format

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optimized for their trading activity. As an example, a customer may specify a minimum quantity for a bid or offer to be displayed. As another example, the customer may customize the display by specifying a minimum price granularity (the smallest allowable increment) for displaying bids or offers (i.e. such as 1/32 of a dollar), which will cause prices with greater granularity to be rounded as appropriate and FIG. 4 depicts a typical market data screen of the present invention. Such screens can be customized as to data or order to conform to the customer's trading style. Here the customer 10 has elected to receive only NASDAQ 52 data by failing to check ECN election box. Thus, screen nly displays NASDAQ level I & II information. The security under review is Dell Computer Corp. It was elected by inserting its ticker symbol DELL in space. NASDAQ Level I information is displayed at the top of screen including the last trade price, an arrow indicating the current movement of the highest bid, the net change of the last trade price with respect to yesterday's closing price, the volume of the last trade, the high and low trade prices for the day, and the total volume traded for the day. Each screen also contains bid and offer data. The bids are sorted in descending order by price, and the offers are sorted in ascending order by price. For each quote, the following information is displayed: volume in 100's of shares, the four-character identification of the market maker or ECN, and the price. A \* character is used to show the most recently updated quote. The grayed entries indicate the highest bid and of three ECNs Island (ISLD), Instinet (INCA) and Strike (STRK) and the lowest offer, and of Instinet, Island and Strike. Thus, the latest offer for Dell was made by the market maker SHWD, that is Sherwood Securities, which offered to sell 1000 shares at 397/16. Screen shows no more than pricing information currently available from NASDAQ Level II service. (Note abstract and see column 8 lines 28-38 and lines 48-67 and column 9 lines 1-8).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Keiser to include determining whether any of the first computer program entities has offered an improved price, higher than the proposed price for buying or lower than the proposed price for selling and providing the improved price as the published price, wherein the notifying, determining

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and providing and are performed by a program second computer program entity executing on a computer taught by Korhammer in order to trade and analyze selected securities and aggregates and integrates securities trading information and order placement from various trading systems.

As per claim 4-5, Keiser receiving a plurality of improved prices from two or more of the entities during the predetermined interval, and selecting the best of the improved prices as the published price. (Note abstract and column 6 lines 45-65 and column 27 lines 10-25).

As per claim 7, 10-11, Keiser a method of participating in pricing of security comprising: of receiving a proposed price for a the security from a second computer program entity and a computer. (Note abstract and see column 2 lines 57-67 and column 3 lines 1-28).

Keiser fail to explicitly teach determining whether to improve upon the proposed price, and when the determination is affirmative, offering an improved price to the second computer program entity which can be provided by the second computer program entity as a published price to a third party wherein the receiving determining and offering are performed by a first computer program entity executing on a computer.

However Korhammer discloses at trading terminal, the customer may filter and/or customize the data displayed based on trading preferences. These features allow the customer to remove orders that are less desirable and view the data in a format optimized for their trading activity. As an example, a customer may specify a minimum quantity for a bid or offer to be displayed. As another example, the customer may customize the display by specifying a minimum price granularity (the smallest allowable increment) for displaying bids or offers (i.e. such as 1/32 of a dollar), which will cause prices with greater granularity to be rounded as appropriate and FIG. 4 depicts a typical market data screen of the present invention. Such screens can be customized as to data or order to conform to the customer's trading style. Here the customer 10 has elected to receive only NASDAQ 52 data by failing to check ECN election box. Thus, screen nly displays NASDAQ level I & II information. The security under review is Dell Computer Corp. It was elected by inserting its ticker symbol DELL in space. NASDAQ

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Level I information is displayed at the top of screen including the last trade price, an arrow indicating the current movement of the highest bid, the net change of the last trade price with respect to yesterday's closing price, the volume of the last trade, the high and low trade prices for the day, and the total volume traded for the day. Each screen also contains bid and offer data. The bids are sorted in descending order by price, and the offers are sorted in ascending order by price. For each quote, the following information is displayed: volume in 100's of shares, the four-character identification of the market maker or ECN, and the price. A \* character is used to show the most recently updated quote. The grayed entries indicate the highest bid and of three ECNs Island (ISLD), Instinet (INCA) and Strike (STRK) and the lowest offer, and of Instinet, Island and Strike. Thus, the latest offer for Dell was made by the market maker SHWD, that is Sherwood Securities, which offered to sell 1000 shares at 397/16. Screen shows no more than pricing information currently available from NASDAQ Level II service. (Note abstract and see column 8 lines 28-38 and lines 48-67 and column 9 lines 1-8).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Keiser to include determining whether to improve upon the proposed price, and when the determination is affirmative, offering an improved price to the second computer program entity which can be provided by the second computer program entity as a published price to a third party wherein the receiving determining and offering are performed by a first computer program entity executing on a computer taught by Korhammer in order to trade and analyze selected securities and aggregates and integrates securities trading information and order placement from various trading systems.

As per claim 8, Keiser disclose comprising requiring the first computer program entity to register with the second computer program entity to receive proposed prices for trading the security to receive proposed prices for trading the security. (See column 2 lines 25-35 and column 21 lines 60-65).

As per claim 9, Keiser disclose receiving a current price at the first computer program entity a current published price from the second computer program entity is

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deciding whether the published price is satisfactory to complete a transaction and when the decision is that the published price is not satisfactory then registering the first computer program entity with the second computer program entity without booking an order for security. (Note abstract and see column 3 lines 15-65 and column 4 lines 5-56 and column 6 lines 45-55 and column 27 lines 10-25 and column 21 lines 60-65).

As per claims 12, 14-16, 19, and 20, 21-22, Keiser disclose maintaining an order book including orders to buy or sell specified quantities of the security at respective prices, the lowest sell

order price of the booked orders being the book sell price, the highest buy price of the booked orders being the book buy order price and a computer. (Note abstract and see column 2 lines 57-67 and column 3 lines 1-28).

Keiser fail to explicitly teach engaging in a price discovery procedure with a set of first computer program entities before responding to a request for a current buy or sell price of the security to produce an discovered price, and providing the discovered price as the current buy or sell price, being higher than the book buy price or lower than the book sell price wherein the maintaining engaging and providing are performed by a second computer program entity program executing on a computer.

However Korhammer discloses at trading terminal, the customer may filter and/or customize the data displayed based on trading preferences. These features allow the customer to remove orders that are less desirable and view the data in a format optimized for their trading activity. As an example, a customer may specify a minimum quantity for a bid or offer to be displayed. As another example, the customer may customize the display by specifying a minimum price granularity (the smallest allowable increment) for displaying bids or offers (i.e. such as 1/32 of a dollar), which will cause prices with greater granularity to be rounded as appropriate and FIG. 4 depicts a typical market data screen of the present invention. Such screens can be customized as to data or order to conform to the customer's trading style. Here the customer 10 has elected to receive only NASDAQ 52 data by failing to check ECN election box. Thus, screen nly displays NASDAQ level I & II information. The security under review is Dell Computer Corp. It was elected by inserting its ticker symbol DELL in space. NASDAQ

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Level I information is displayed at the top of screen including the last trade price, an arrow indicating the current movement of the highest bid, the net change of the last trade price with respect to yesterday's closing price, the volume of the last trade, the high and low trade prices for the day, and the total volume traded for the day. Each screen also contains bid and offer data. The bids are sorted in descending order by price, and the offers are sorted in ascending order by price. For each quote, the following information is displayed: volume in 100's of shares, the four-character identification of the market maker or ECN, and the price. A \* character is used to show the most recently updated quote. The grayed entries indicate the highest bid and of three ECNs Island (ISLD), Instinet (INCA) and Strike (STRK) and the lowest offer, and of Instinet, Island and Strike. Thus, the latest offer for Dell was made by the market maker SHWD, that is Sherwood Securities, which offered to sell 1000 shares at 397/16. Screen shows no more than pricing information currently available from NASDAQ Level II service. (Note abstract and see column 8 lines 28-38 and lines 48-67 and column 9 lines 1-8).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Keiser to include engaging in a price discovery procedure with a set of first computer program entities before responding to a request for a current buy or sell price of the security to produce an discovered price, and providing the discovered price as the current buy or sell price, being higher than the book buy price or lower than the book sell price wherein the maintaining engaging and providing are performed by a second computer program entity program executing on a computer taught by Korhammer in order to trade and analyze selected securities and aggregates and integrates securities trading information and order placement from various trading systems.

As per claim 13, Keiser disclose wherein the price discovery procedure includes providing the book buy or sell price to at least one entity registered to participate in the price discovery procedure. (See column 2 lines 5-65 and column 3 lines 15-65 and column 4 lines 5-56 and column 6 lines 45-55 and column 27 lines 10-25).

### **Conclusion**



### **Response to Applicant's arguments**

5. Applicant's arguments filed 2/23/06 has been fully considered but they are moot in view of new grounds of rejections.

6. In response to Applicant's arguments as it pertains to Keiser and Korhammer.

7. In response to Applicant's arguments the Keiser and Korhammer fail to teach or suggest "providing a published price for a security comprising: notifying (i. e, displays instruments") a set of computers of a proposed price for buying or selling the security, and a computer and determining whether any of the first computer program entities has offered an improved price, higher than the proposed price for buying or lower than the proposed price for selling and providing the improved price as the published price, wherein the notifying, determining and providing and are performed by a program second computer program entity executing on a computer" examiner disagrees with Applicant's because these limitations are addressed in a combination of teachings as stated,

discloses a method of providing a published price for a security comprising: notifying (i. e, displays instruments") a set of computers (i. e, plurality of client computers") of a proposed price for buying or selling the security, and a computer. Note abstract and see column 2 lines 57-67 and column 3 lines 1-28.

Korhammer discloses at trading terminal, the customer may filter and/or customize the data displayed based on trading preferences. These features allow the customer to remove orders that are less desirable and view the data in a format optimized for their trading activity. As an example, a customer may specify a minimum quantity for a bid or offer to be displayed. As another example, the customer may customize the display by specifying a minimum price granularity (the smallest allowable increment) for displaying bids or offers (i.e. such as 1/32 of a dollar), which will cause prices with greater granularity to be rounded as appropriate and FIG. 4 depicts a typical market data screen of the present invention. Such screens can be customized as to data or order to conform to the customer's trading style. Here the customer has elected to receive only NASDAQ 52 data by failing to check ECN election box. Thus, screen nly displays NASDAQ level I & II information. The security under review is Dell Computer Corp. It

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It is obviously clear that Applicant's claimed limitations are addressed with in the Keiser and Korhammer.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clement B Graham whose telephone number is 703-305-1874. The examiner can normally be reached on 7am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Sough can be reached on 703-308-0505. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-0040 for regular communications and 703-305-0040 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.


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CG

May 12, 2006

  
FRANTZY POINVIL  
PRIMARY EXAMINER  
*Ac 3628*